

Curtis L. Ashton, et al.
Application No. 09/200,631
Amendment dated September 17, 2003
Reply to Office Action of June 18, 2003

Listing of Claims:

- F1
1. (previously presented) A system for powering one or more devices in a fiber optic communication network, which transmits communication data between a telecommunications service provider and a remote user device, the system comprising:
 - an optical network node for converting the communication data from a digital optical state to a digital electrical state;
 - a fiber optic communication medium configured to transfer the communication data between the telecommunications service provider and the optical network node; and
 - an electrical power source configured to supply an electrical supply voltage to power the optical network node, the electrical power source comprising an alarm system configured to monitor the operation of the electrical power source and transmit electrical power source operation information to the telecommunications service provider.
 2. (canceled)
 3. (canceled)
 4. (previously presented) The system of claim 1, wherein the electrical power source is located proximate to the optical network node.
 5. (previously presented) The system of claim 1, wherein the electrical power source is remote from the optical network node and supplies power to a plurality of optical network nodes.
 6. (previously presented) The system of claim 1, wherein the electrical power source is located proximate to the telecommunications service provider.
 7. (previously presented) The system of claim 1, wherein the electrical power source is located proximate to a digital loop carrier.

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8. (original) The system of claim 1, wherein the remote user device is a telephone.
9. (original) The system of claim 1, wherein the remote user device is a computer.
10. (original) The system of claim 1, wherein the remote user device is a television.
11. (previously presented) The system of claim 17, wherein the electrical power source comprises a plurality of rectifiers, a plurality of converters, a plurality of current limiters, and a plurality of batteries configured to supply the DC voltage to the electrical power source.
12. (canceled)
13. (previously presented) The system of claim 1, further comprising one or more conducting mediums configured to connect the alarm system in the electrical power source to the optical network node for relaying power source operation information to the telecommunications service provider over the fiber optic communication medium.
14. (previously presented) A method for powering one or more devices in a fiber optic communication network, which transmits communication data between a telecommunications service provider and a user device, the method comprising:
- transferring digital communication data between the telecommunications service provider and an optical network node;
 - converting the digital communication data from an optical state to an electrical state using the optical network node;
 - transmitting an electrical supply voltage from an electrical power source to the optical network node;
 - an alarm system in the electrical power source monitoring the operation of the electrical power source; and
 - transmitting electrical power source operation information from the alarm system to the telecommunications service provider.

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15. (previously presented) The system as recited in claim 1, wherein the optical network node comprises an optical network unit (ONU).
16. (previously presented) The system as recited in claim 1, wherein the optical network node comprises a digital subscriber line access multiplexer (DSLAM).
17. (previously presented) The system as recited in claim 1, wherein the electrical power source comprises an AC power feed for providing power to the electrical power source during normal operation and a DC power feed for providing power to the electrical power source when the AC power feed is inoperable.
18. (previously presented) The system as recited in claim 1, further comprising an electrical conducting medium configured to conduct the electrical supply voltage and the communication data from the optical network node to a the remote user device.
19. (previously presented) The system as recited in claim 18, further comprising a network interface device connected between the optical network node and the remote user device.
20. (previously presented) The method as recited in claim 14, wherein the step of transferring digital communication data between the telecommunications service provider and the optical network node comprises transferring digital communication data between the telecommunications service provider and an optical network unit (ONU).
21. (previously presented) The method as recited in claim 14, wherein the step of transferring digital communication data between the telecommunications service provider and the optical network node comprises transferring digital communication data between the telecommunications service provider and a digital subscriber line access multiplexer (DSLAM).

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22. (previously presented) The method as recited in claim 14, wherein the step of transmitting electrical power source operation information from the alarm system to the telecommunications service provider comprises transmitting alarm signals to the telecommunications service provider.

23. (previously presented) The method as recited in claim 14, wherein the step of transmitting electrical power source operation information from the alarm system to the telecommunications service provider comprises transmitting power level and operational data to the telecommunications service provider.

24. (previously presented) The method as recited in claim 14, wherein the step of transmitting an electrical supply voltage from an electrical power source to the optical network node comprises an AC power feed supplying power to the electrical power source during normal operation and a DC power feed supplying power to the electrical power source when the AC power feed is inoperable.

25. (previously presented) The method as recited in claim 14, further comprising conducting both the electrical supply voltage and the digital communication data along a single electrical conducting medium from the optical network node to the remote user device.

26. (previously presented) The method as recited in claim 25, further comprising network interface device interfacing between the optical network node and the remote user device.

27. (previously presented) The system of claim 1, wherein the electrical power source operation information is selected from a group consisting of information about an AC power source, information about a rectifier's voltage, information about a converter's voltage, and information about a current limiter's current.

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28. (previously presented) The method as recited in claim 14, wherein monitoring the operation of the electrical power source comprises monitoring information selected from a group consisting of information about an AC power source, information about a rectifier's voltage, information about a converter's voltage, and information about a current limiter's current.

29. (new) The method of claim 14, wherein transferring digital communication data between the telecommunications service provider and the optical network node comprises transmitting the digital communication data via a fiber optic communication medium, and wherein transmitting electrical power source operation information from the alarm system to the telecommunications service provider comprises transmitting electrical power source operation information via a medium other than the fiber optic communication medium.

30. (new) The system of claim 1, wherein the electrical power source operation information is transmitted to the telecommunications service provider via a medium other than the fiber optic communication medium.